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DATE: Saturday, October 28, 2006

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<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L7	express\$3 same L2	1
<input type="checkbox"/>	L6	express\$5 same L2	1
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<input type="checkbox"/>	L2	(RNA adj polymerase) same L1	43
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END OF SEARCH HISTORY

STN SEARCH

#10/540,145

10/28/2006

=> index bioscience medicine

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 17:31:51 ON 28 OCT 2006

71 FILES IN THE FILE LIST IN STNINDEX

=> S ((polynucleotide (w)Phosphorylase)or PNPase)

22 FILE AGRICOLA
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186 FILE ESBIOBASE

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214 FILE GENBANK
28 FILE IFIPAT
17 FILE JICST-EPLUS
253 FILE LIFESCI
637 FILE MEDLINE
5 FILE NTIS
164 FILE PASCAL
15 FILE PHAR
492 FILE SCISEARCH
143 FILE TOXCENTER
209 FILE USPATFULL
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1 FILE VETU
60 FILE WPIDS
60 FILE WPINDEX

68 FILES SEARCHED...

1 FILE NLDB

39 FILES HAVE ONE OR MORE ANSWERS, 71 FILES SEARCHED IN STNINDEX

L1 QUE ((POLYNUCLEOTIDE (W) PHOSPHORYLASE) OR PNPASE)

=> d rank

F1	1276	CAPLUS
F2	637	MEDLINE
F3	518	BIOSIS
F4	492	SCISEARCH
F5	362	EMBASE
F6	253	LIFESCI
F7	214	GENBANK
F8	209	USPATFULL
F9	186	ESBIOBASE
F10	170	BIOTECHNO

F11	164	PASCAL
F12	159	DGENE
F13	143	TOXCENTER
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F18	60	WPIDS
F19	60	WPINDEX
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F22	28	CABA
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F26	17	JICST-EPLUS
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F31	9	CEABA-VTB
F32	7	FSTA
F33	5	ANABSTR
F34	5	EMBAL
F35	5	NTIS
F36	3	AQUASCI
F37	2	FROSTI
F38	1	VETU
F39	1	NLDB

=> file f1-f6, f8-f11, f13

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=> S L1
L2 4410 L1

=> S express? (s) L2
L3 350 EXPRESS? (S) L2

=> S purif? (s) L3
L4 19 PURIF? (S) L3

=> S (tag or his or GST or T7CBD or Trx or flag) (s) L4
L5 6 (TAG OR HIS OR GST OR T7CBD OR TRX OR FLAG) (S) L4

=> S (tag or his or GST or T7CBD or Trx or flag) (s) L3
L6 8 (TAG OR HIS OR GST OR T7CBD OR TRX OR FLAG) (S) L3

=> S (tag or his or GST or T7or CBD or Trx or flag) (s) L3
L7 8 (TAG OR HIS OR GST OR T7OR CBD OR TRX OR FLAG) (S) L3

=> s polymerase (s) L4
L8 3 POLYMERASE (S) L4

=> s polymerase (s) L7
L9 3 POLYMERASE (S) L7

=> dup rem 17
PROCESSING COMPLETED FOR L7
L10 5 DUP REM L7 (3 DUPLICATES REMOVED)

=> d ibib abs l10 1-5

L10 ANSWER 1 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2006:195560 USPATFULL <<LOGINID::20061028>>
TITLE: Process for producing pnpase
INVENTOR(S): Murai, Masatoshi, Hyogo, JAPAN

NUMBER KIND DATE

PATENT INFORMATION: US 2006166315 A1 20060727
APPLICATION INFO.: US 2003-540145 A1 20031225 (10)
WO 2003-JP16653 20031225
20050621 PCT 371 date

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GREENBERG TRAURIG, LLP, MET LIFE BUILDING, 200 PARK
AVENUE, NEW YORK, NY, 10166, US

NUMBER OF CLAIMS: 19

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Page(s)

LINE COUNT: 695

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a process for producing ***PNPase***, wherein
PNPase can be produced easily with high efficiency, and
problematic contamination with endotoxin in synthesis of a nucleic acid
polymer as a raw material of pharmaceutical preparations can be reduced.
PNPase is produced by Escherichia coil or the like having a T7
RNA polymerase gene, transformed with an ***expression*** vector
having a ***PNPase*** gene and a T7 promoter ligated therein. For
further facilitating the step of purifying ***PNPase***, an
expression vector having a ***tag*** gene is utilized and
the culture time is prolonged.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2004:570017 CAPLUS <<LOGINID::20061028>>
DOCUMENT NUMBER: 141:102243
TITLE: Bacterial expression of PNPase and use in
polynucleotide synthesis
INVENTOR(S): Murai, Masatoshi
PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058959	A1	20040715	WO 2003-JP16653	20031225
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003292772	A1	20040722	AU 2003-292772	20031225
EP 1582584	A1	20051005	EP 2003-768192	20031225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006166315	A1	20060727	US 2005-540145	20050621
PRIORITY APPLN. INFO.: JP 2002-376780 A 20021226				
WO 2003-JP16653 W 20031225				

AB The invention provides a process for highly efficiently and conveniently producing polynucleotide phosphorylase (PNPase) while reducing contamination with endotoxins causing problems in synthesizing a nucleic acid polymer, useful as drug synthesis starting material. PNPase is produced using Escherichia coli, etc. having a T7 RNA polymerase gene which has been transformed with an expression vector carrying a PNPase gene and a T7 promoter ligated together. Moreover, the step of purifying ***PNPase*** is simplified by using an ***expression*** vector having a ***tag*** gene or prolonging the culture time. ***Expression*** of Escherichia coli ***PNPase*** with ***His*** ***tag*** with reduced endotoxin contamination is described. Synthesis of polyinosinic acid (av. yield 50%, chain length 2200 bp) using the recombinant PNPase from inosine diphosphate trisodium salt and polycytidylc acid (av. yield 65%, chain length 2200 bp) from cytidine diphosphate trisodium salt was accomplished.

L10 ANSWER 3 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2004:217827 USPATFULL <<LOGINID::20061028>>

TITLE: Cathepsin V-like polypeptides

INVENTOR(S): Tang, Y. Tom, San Jose, CA, United States
Goodrich, Ryle W., Los Angeles, CA, United States
Asundi, Vinod, Foster City, CA, United States
Drmanac, Radoje T., Palo Alto, CA, United States

PATENT ASSIGNEE(S): Nuvelo, Inc., Sunnyvale, CA, United States (U.S.
corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 6783969 B1 20040831

APPLICATION INFO.: US 2001-799451 20010305 (9)

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Myers, Carla J.

NUMBER OF CLAIMS: 3

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 7745

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 5 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED. on

STN

ACCESSION NUMBER: 1999-0215139 PASCAL <<LOGINID::20061028>>

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TITLE (IN ENGLISH): ISOLATION AND CHARACTERIZATION OF THE GENE CODING FOR A PUTATIF POLYNUCLEOTIDE PHOSPHORYLASE THAT CONTAINS A BINDING DOMAIN FOR TBP (TATA-BINDING PROTEIN)

TITLE (IN FRENCH): ISOLEMENT ET CARACTERISATION D'UN GENE D'ARABIDOPSIS CODANT POUR UNE POLYNUCLEOTIDE PHOSPHORYLASE PUTATIVE INTERAGISSANT AVEC TBP (TATA-BINDING PROTEIN)

AUTHOR: KIM Yeon-Jung; MACHE Regis (dir.)

CORPORATE SOURCE: Universite de Grenoble 1, Saint-Martin-d'Heres, France (tutelle)

SOURCE: (1998-10), 150 refs.

136 p.

Dissertation Information: Universite de Grenoble 1.

Saint-Martin-d'Heres. FRA, Th. doct., 98GRE10171

DOCUMENT TYPE: Dissertation

BIBLIOGRAPHIC LEVEL: Monographic

COUNTRY: France

LANGUAGE: French

SUMMARY LANGUAGE: French; English

AVAILABILITY: INIST-T 123317, T98GRE10171 0000; RBCCN-384212103, T98GRE10171 0000

AN 1999-0215139 PASCAL <<LOGINID::20061028>>

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ABFR L'ARN polymerase II, l'enzyme core responsable de la synthese des ARNm chez les eucaryotes, exige des facteurs supplementaires pour l'initiation de la transcription (facteurs generaux de transcription : TFIIA, TFIID, TFIIF, TFIIE, TFIIH et TFIJ). L'assemblage du complexe d'initiation de la transcription au niveau des elements promoteurs debute par le recrutement du facteur TFIID, qui est un facteur d'initiation essentiel constitue de la proteine de liaison a la boite TATA (TBP) et de plusieurs facteurs associes a TBP. Ces derniers sont appellees TAFs et certains semblent agir également comme coactivateurs qui modulent la regulation transcriptionnelle en interagissant avec divers activateurs ou represseurs transcriptionnels. Le but de ce travail consistait a rechercher des proteines qui interagiraient avec la proteine TBP2 d'Arabidopsis. Les connaissances actuelles concernant la composition du complexe d'initiation de la transcription par l'ARN polymerase II etaient limitees aux systemes humains, de Drosophiles ou de levures. Peu d'information etait disponible concernant le systeme vegetal a l'exception de certaines proteines TBP isolees chez quelques especes. Nous avons utilise le systeme double hybride de la levure pour cibler une banque d'ADNc d'A. thaliana et un clone positif a ete finalement isole. L'ADNc ainsi isole a ete introduit dans un vecteur d'

expression d'E. coli pour une surproduction de la proteine sous forme de fusion a la ***GST***. L'analyse de l'interaction proteine-proteine in vitro en utilisant la proteine (TIP : TBP Interacting Polypeptide) surexprimee et la proteine cible TBP fusionnee a un enchainement d'histidine a confirme l'interaction directe entre TIP et TBP. Une experience de gel retard a prouve que TIP empêche TBP2 de se lier a la boite TATA in vitro. Afin de trouver le gene et l'ADNc complet, une banque genomique et une deuxieme banque d'ADNc ont ete ciblées avec le fragment d'ADNc precedentement isole comme sonde. Un fragment d'ADN d'approximativement 7 kb contenant le gene entier, et un ADNc, codant une proteine d'environ 110 kDa, ont ete obtenus et sequences. La comparaison de sequence utilisant le logiciel BLAST a revele une forte homologie avec la ***PNPase*** d'E. coli (***polynucleotide***

phosphorylase) au niveau du domaine N-terminal de la proteine. Mais le domaine C-terminal contenant l'activite de liaison a TBP ne montre aucuné similitude particuliére avec d'autres proteines. Nous avons montre, par co-immunoprecipitation, que cette proteine complete interagit avec TBP in vitro. En outre, le resultat d'une analyse de RNase protection indique que le gene est transcrit constitutivement en un ARNm presentant un intron non episse (retention d'intron). Cet ARNm incomplettement episse semble coder pour la proteine tronquée, ce qui est du a la presence de codons stop dans l'intron. L'epissage de cet intron semble etre regule de facon tissu-specificue et par des stress

environnementaux : c'est à dire que l'ARNm complètement épissé est trouvé seulement dans les graines et les siliques et dans les plantes traitées au froid. Basé sur l'ensemble des résultats, l'implication de la protéine ainsi identifiée dans la régulation de l' ***expression*** des gènes est discutée.

L10 ANSWER 5 OF 5 LIFESCI COPYRIGHT 2006 CSA on STN DUPLICATE 2
ACCESSION NUMBER: 96:73885 LIFESCI <<LOGINID::20061028>>

TITLE: Proteins associated with RNase E in a multicomponent ribonucleolytic complex

AUTHOR: Miczak, A.; Kaberdin, V.R.; Wei, Chia-Li; Lin-Chao, Sue*

CORPORATE SOURCE: Inst. Mol. Biol., Academia Sinica, Nankang Taipei, Taiwan
11529

SOURCE: PROC. NATL. ACAD. SCI. USA, (1996) vol. 93, no. 9, pp.
3865-3869.

ISSN: 0027-8424.

DOCUMENT TYPE: Journal

FILE SEGMENT: N; J

LANGUAGE: English

SUMMARY LANGUAGE: English

AB The Escherichia coli endoribonuclease RNase E is essential for RNA processing and degradation. Earlier work provided evidence that RNase E exists intracellularly as part of a multicomponent complex and that one of the components of this complex is a 3'-to-5' exoribonuclease, ***polynucleotide*** ***phosphorylase*** (EC 2.7.7.8). To isolate and identify other components of the RNase E complex, ***FLAG***-epitope-tagged RNase E (***FLAG*** -Rne) fusion protein was purified on a monoclonal antibody-conjugated agarose column. The ***FLAG*** -Rne fusion protein, eluted by competition with the synthetic ***FLAG*** peptide, was found to be associated with other proteins. N-terminal sequencing of these proteins revealed the presence in the RNase E complex not only of ***polynucleotide*** ***phosphorylase*** but also of DnaK, RNA helicase, and enolase (EC 4.2.1.11). Another protein associated only with epitope-tagged temperature-sensitive (Rne-3071) mutant RNase E but not with the wild-type enzyme is GroEL. The ***FLAG*** -Rne complex has RNase E activity in vivo and in vitro. The relative amount of proteins associated with wild-type and Rne-3071 ***expressed*** at an elevated temperature differed.

=> d his

L1 QUE ((POLYNUCLEOTIDE (W) PHOSPHORYLASE) OR PNPASE)

FILE 'CAPLUS, MEDLINE, BIOSIS, SCISEARCH, EMBASE, LIFESCI, USPATFULL, ESBIOBASE, BIOTECHNO, PASCAL, TOXCENTER' ENTERED AT 17:34:20 ON 28 OCT 2006

L2 4410 S L1
L3 350 S EXPRESS? (S) L2

L4 19 S PURIF? (S) L3

L5 6 S (TAG OR HIS OR GST OR T7CBD OR TRX OR FLAG) (S) L4

L6 8 S (TAG OR HIS OR GST OR T7CBD OR TRX OR FLAG) (S) L3

L7 8 S (TAG OR HIS OR GST OR T7OR CBD OR TRX OR FLAG) (S) L3

L8 3 S POLYMERASE (S) L4

L9 3 S POLYMERASE (S) L7

L10 5 DUP REM L7 (3 DUPLICATES REMOVED)

=> log y

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Search for

NiceZyme View of ENZYME: EC 2.7.7.8

Official Name

Polyribonucleotide nucleotidyltransferase.

Alternative Name(s)

Polynucleotide phosphorylase.

Reaction catalysed

RNA(n+1) + phosphate <=> RNA(n) + a nucleoside diphosphate

Comment(s)

ADP, IDP, GDP, UDP and CDP can act as donors.

Cross-references

Biochemical

Pathways; map [H1](#) ; [H2](#) ; [J7](#) ; [K7](#) ; [J8](#) ; [K8](#)
number(s)

BRENDA [2.7.7.8](#)

PUMA2 [2.7.7.8](#)

PRIAM enzyme-specific profiles [2.7.7.8](#)

KEGG Ligand Database for Enzyme Nomenclature [2.7.7.8](#)

IUBMB Enzyme Nomenclature [2.7.7.8](#)

IntEnz [2.7.7.8](#)

MEDLINE [Find literature relating to 2.7.7.8](#)

MetaCyc [2.7.7.8](#)

UniProtKB/Swiss-Prot Q8TCS8, PNPT1_HUMAN; Q8K1R3, PNPT1_MOUSE; Q5RCW2, PNPT1_PONPY;
P50849, PNP_BACSU; P57454, PNP_BUCAI; Q8K9H5, PNP_BUCAP;
Q89AF8, PNP_BUCBP; P05055, PNP_ECOLI; P44584, PNP_HAEIN;
P41121, PNP_PHOLU; O87792, PNP_PSEPU; Q9ZD43, PNP_RICPR;
O34275, PNP_YEREN;

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ENZYME: 2.7.7.8

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Entry	EC 2.7.7.8	Enzyme
Name	polyribonucleotide nucleotidyltransferase; polynucleotide phosphorylase; PNPase; nucleoside diphosphate:polynucleotidyl transferase; polyribonucleotide phosphorylase	
Class	Transferases Transferring phosphorus-containing groups Nucleotidyltransferases	
Sysname	polyribonucleotide:phosphate nucleotidyltransferase	
Reaction (IUBMB)	RNA(<i>n</i> +1) + phosphate = RNA(<i>n</i>) + a nucleoside diphosphate [RN:R07282]	
Reaction (KEGG)	R07282 > R00437 R00438 R00439 R00440 Show all	
Substrate	RNA <i>n</i> +1 [CPD:C00046]; phosphate [CPD:C00009]	
Product	RNA <i>n</i> [CPD:C00046]; nucleoside diphosphate [CPD:C00454]	
Comment	ADP, IDP, GDP, UDP and CDP can act as donors.	
Pathway	PATH: map00230 Purine metabolism PATH: map00240 Pyrimidine metabolism	
Ortholog	KO: K00962 polyribonucleotide nucleotidyltransferase	
Genes	HSA: 87178(PNPT1) PTR: 459247 MMU: 71701(Pnpt1) RNO: 360992(Pnpt1) CFA: 481376(LOC481376) GGA: 421206(PNPT1) DME: Dmel(CG11337) CEL: BE0003N10.1 ATH: At5g14580(T15N1.70) CME: CMH146C CMQ324C CAL: orf19.1578(RRP5) ECO: b3164(pnp) ECE: Z4525(pnp) ECS: ECs4045 ECC: c3920(pnp) ECI: UTI89_C3594(pnp) ECP: ECP_3252 STY: STY3463(pnp) STT: t3200(pnp) SPT: SPA3149(pnp) SEC: SC3223(pnp) STM: STM3282(pnp) YPE: YPO3490(pnp)	